Calendar No. 746

82D CONGRESS, 1st Session | SENATE | REPORT No. 791

CHEATHAM DAM ON CUMBERLAND RIVER, TENN.

SEPTEMBER 21 (legislative day, SEPTEMBER 19), 1951.—Ordered to be printed

Mr. STENNIS, from the Committee on Public Works, submitted the following

REPORT

[To accompany S. 97]

The Committee on Public Works, to whom was referred the bill (S. 97) to authorize the construction, operation, and maintenance of facilities for generating hydroelectric power at the Cheatham Dam on the Cumberland River in Tennessee, having considered the same, report favorably thereon with an amendment, and recommend that the bill, as amended, do pass.

The amendment is as follows:

Page 2, line 3, strike out the figures "$15,000,000" and insert in lieu thereof the figures "$18,200,000".

The estimated cost of the power-generating facilities at the Cheatham project, based on 1950 price levels, was $15,000,000. A revision of this estimate to conform to current construction indexes and latest available information indicates that the present estimate of the cost of power features is $18,200,000. The bill has been amended to include the latest cost estimate.

The committee held hearings on this bill at which the Senators from Tennessee and Kentucky, representatives of Federal agencies, and local citizens presented information relative to the expansion of industry, growing power needs and demands, need for additional power-generating facilities in the Tennessee-Cumberland area, and the desire for modifying the Cheatham lock and dam to include hydroelectric-power-generating facilities.

The Cheatham lock and dam was authorized in the River and Harbor Act of 1946, and is now under construction. When the project was authorized, it was contemplated that power-generating facilities would be installed at a later date when fully justified, and provisions for such future installation are being included in the project now under construction. The plans of the Tennessee Valley Authority for utilization of the power resources of the region, including those of the Cumberland River Basin, include the proposed hydroelectric

installation at the Cheatham lock and dam. The committee is of the opinion that the power situation in the area is now so acute that the installation of generating facilities at the Cheatham project is fully justified. Enactment of this legislation is necessary to provide authority for such installation.

The committee believes it essential that the power demands in the Tennessee-Cumberland area be met by new developments. Current estimates indicate that power demands will require a total installation of 6.5 million kilowatts of generating capacity by 1955. The total installed capacity at this time is slightly over 3 million kilowatts. A total potential in excess of 1 million kilowatts is available within the Cumberland River Basin. Since the Cheatham Dam is under construction, it appears that power facilities could be added there without difficulty and completed by late 1954. The power could be absorbed as soon as it could be made available and would make a valuable contribution to the power supply needs of the area.

A description of the Cheatham project follows:

Location.—At mile 148.7 on the Cumberland River in Cheatham and Dickson Counties, Tenn., about 9 miles northwest of Ashland City and 42 river miles below Nashville, Tenn.

Existing project.—The navigation project now in operation below Nashville consists of locks and dams A to F, inclusive, and No. 1. The locks are 52 by 280 feet, from 28 to 47 years old, and provide a 6-foot navigation channel.

Authorized project.—The project authorized in the 1946 River and Harbor Act (H. Doc. 761, 79th Cong.) provides for three moderate-height dams with 110 by 800 foot locks, to provide a 9-foot channel 200 feet wide below Nashville. The Cheatham Dam is the uppermost of the three units and will eliminate lock and dams Nos. 1 and A. Its pool will extend 52.3 miles upstream to lock and dam No. 2. The dam will be a concrete overflow section with a maximum height of 65 feet. The lock will have a normal lift of 27 feet.

Proposed modification.—Inclusion of a powerhouse and power-generating facilities consisting of three 12,000-kilowatt units. No alteration would be made to the lock and dam.

Fiscal.—The estimated cost of the Cheatham lock and dam in 1940 was $6,400,000. On the basis of 1951 price levels, the estimated cost is $14,200,000 for the navigation project alone. Of this amount, $3,636,500 has been appropriated, and the project is under construction. The budget estimate for fiscal year 1952 is $3,000,000. The estimated cost of the proposed power-generating facilities based on present price levels is $18,200,000.

Benefits.—The existing navigation project below Nashville, with its small locks and inadequate depths, is obsolete for modern traffic, does not meet the needs of existing commerce, and hinders development of extensive new commerce. Present traffic exceeds 1,600,000 tons annually, consisting principally of oil and steel products, and is increasing progressively. The Cheatham lock and dam will be completed in late 1953, and will meet the needs of prospective commerce, eliminate multiple lockages for existing tows, shorten traveling time, and benefit the area generally. Since the close of World War II the total power usage in the Tennessee-Cumberland area has increased 83 percent. A large part of this use is by various municipalities and cooperatives for residential, commercial, and rural consumption. In

addition, industries connected with phosphates, chemicals, textiles, electro-metallurgical production of ferro-alloys, and installations directly connected with the current defense effort, including ordnance plants, Atomic Energy Commission plants, and other military facilities, use large quantities of power, and the need is increasing. There is a shortage of power in the area, despite the large developments of the Tennessee Valley Authority. Power demands and uses are increasing more rapidly than new power facilities can be installed. The annual value of the power that would be produced is estimated at $1,212,000, and the ratio of annual benefits to costs for the power features is 1.55. That ratio for the navigation project is 3.04.

The following are reports from the Bureau of the Budget, the Defense Electric Power Administration, and the Department of the Army on S. 97:

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., September 14, 1951.

Hon. JOHN L. MCCLELLAN,
Chairman, Committee on Public Works,
United States Senate, Washington, D. C.

MY DEAR SENATOR MCCLELLAN: On August 27, 1951, there was referred to the Defense Electric Power Administration a request of the Subcommittee on Flood Control and Rivers and Harbors, United States Senate, for comment on two bills: S. 97, relating to power facilities at Cheatham Dam, Tenn.; and S. 98, relating to modification of Cumberland River project.

S. 97 would amend the comprehensive plan of improvement of the Cumberland River and tributaries for navigation, flood control, power development, and other purposes authorized by section 1 of the act of Congress of July 24, 1946 (Public Law 525, 79th Cong.). Cheatham Dam, presently under construction, is located downstream from Wolf Creek, Dale Hollow, and Center Hill. The Army Corps of Engineers proposes the installation of three 12,000-kilowatt units which would add 160,000,000 kilowatt-hours of average annual energy to the Cumberland River system. Commercial operation is scheduled as follows: First unit, June 1954; second unit, October 1954; third unit, January 1955. Assuming prompt enactment of S. 97 and the appropriation of necessary funds as required and that materials can be made available when needed, the above schedule appears reasonable. Since the above facilities are included as a power resource and are a part of the expansion program needed to meet defense loads and essential civilian requirements, it is recommended that prompt enactment of S. 97 be approved by the Congress.

S. 98 would authorize construction, operation, and maintenance of the Lower Cumberland Dam and Reservoir on the Cumberland River, Ky. and Tenn., for navigation, flood control, hydroelectric power, and other purposes. Defense Electric Power Administration would prefer not to comment on this project until after the Corps of Engineers completes a project report which, we understand, is presently being prepared. Deferment of comment on this project will also permit a further review by this Administration of the need for additional power facilities for defense and essential civilian requirements in 1955 and later years.

The Bureau of the Budget has advised me that there is no objection to the submission of this report.

Sincerely yours,

OSCAR L. CHAPMAN,
Secretary of the Interior.

DEPARTMENT OF THE ARMY,
Washington D. C., May 9, 1951.

Hon. DENNIS CHAVEZ,
Chairman, Committee on Public Works,
United States Senate.

DEAR SENATOR CHAVEZ: Reference is made to your request for the views of this Department concerning S. 97, Eighty-second Congress, a bill to authorize the construction, operation, and maintenance of facilities for generating hydroelectric power at the Cheatham Dam on the Cumberland River in Kentucky.

The Department of the Army favors the above-mentioned bill.

The purpose of the bill S. 97 is to modify the comprehensive plan of improvement of the Cumberland River and tributaries for navigation, flood control, power development, and other purposes, as authorized by the River and Harbor Act of July 24, 1946, so as to provide for the construction of power-generating facilities at the Cheatham Dam.

The Cheatham Dam is under construction as a part of an urgently needed improvement of the Cumberland River for navigation. The dam will create a head of approximately 30 feet. This head and the regulation of the stream flow by upstream reservoir projects makes possible the economical development of hydroelectric power at the Cheatham Dam. Accordingly, provisions are being made for the future addition of hydroelectric-power facilities at this dam. The need for additional power in Tennessee and surrounding region is increasing at a rapid rate, and the power from the Cheatham Dam can be used as soon as it is made available.

Preliminary but rather thorough studies made by the Corps of Engineers in connection with the design of the navigation facilities at Cheatham show that the benefits from the power which can be developed would be substantially greater than the costs.

Attention is invited to the fact that the Cheatham Dam is located in the State of Tennessee. The bill should therefore be corrected by changing the word "Kentucky" to "Tennessee" in both the title and the body of the bill.

A similar report on H. R. 9867, Eighty-first Congress, an identical bill, has been coordinated among the departments and boards in the Department of Defense in accordance with procedures prescribed by the Secretary of Defense.

The Bureau of the Budget advises that there is no objection to the submission of this report.

Sincerely yours,

FRANK PACE, Jr.,
Secretary of the Army.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D. C., May 4, 1951.

Hon. DENNIS CHAVEZ,
Chairman, Senate Committee on Public Works,
Washington, D. C.

MY DEAR SENATOR CHAVEZ: This is in reply to your request for the views of the Bureau of the Budget on S. 97, to authorize the construction, operation, and maintenance of facilities for generating hydroelectric power at the Cheatham Dam on the Cumberland River in Kentucky.

Attention is invited to the fact that Cheatham Dam is located in the State of Tennessee. The bill should therefore be corrected by changing the word "Kentucky" to "Tennessee" in both the title and the body of the bill.

As you know, Cheatham Dam is now under construction and when completed will provide needed flood control and navigation benefits. At the time this project was authorized, no provision was made for the installation of power-generating facilities at the site. However, in the light of the potentially critical power shortage in this area, it would seem desirable that the power-generating facilities be authorized at this time.

Accordingly, you are advised that enactment of this legislation would be without objection from the standpoint of the program of the President.

Sincerely yours,

F. J. LAWTON, *Director.*

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